


Further Reading Materials

**Geography, Medicine,
Geopolitics, Neuroscience**



OXFORD
for South
East





Has watching the taster lectures left you wanting to learn more about Geography, Medicine, Geopolitics and Neuroscience?

This Further Reading Booklet contains resources which you can watch, listen to or read, to find out more about these subjects, and the degrees and careers that they can lead to. It also offers links to current competitions and initiatives, and topical resources accompanied by extension questions to challenge and develop your academic critical thinking skills. Some of these opportunities would be good to include when writing applications and on your CV, to show your super-curricular interest!

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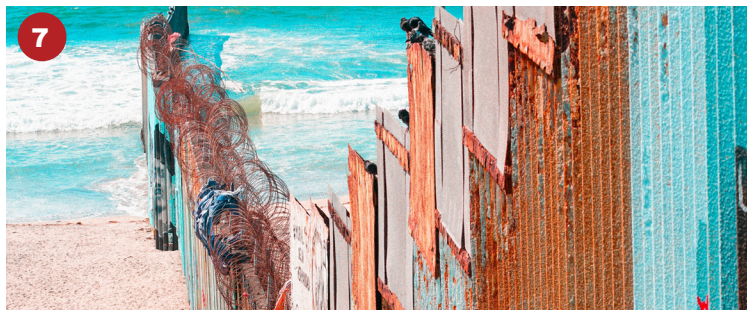


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TASTER LECTURES

How does the environment influence our heritage?



In her lecture, Dr Richards explained that her research interests lie within the field of geomorphology, the study of landforms and the processes which interact with them. She discussed how the environment and heritage have a reciprocal relationship, and explained that a disruption to the order of our environment has a direct impact on our heritage.



Dr Jenny Richards, Supernumerary Teaching Fellow in Physical Geography

[Link to lecture](#)




Follow these links to find out about degrees and careers related to this lecture

[Anthropology and Archaeology](#)

[Geography](#)

[Carley Smith-Huggins, Museum Education Officer](#)



How does the immune system make you feel?

Dr Davies began his lecture by explaining the inextricable links between our body, our emotions and how we perceive our well-being. He explained that our sense of touch is complicated, and made up various different systems which help us interpret different kinds of touch. Dr Davies then moved to consider pain, and how the ordering of our immune system can work to alleviate this pain or render it long-lasting.



Dr Alex Davies, UKRI
Future Leaders Fellow

[Link to lecture](#)



Follow these links to find out about degrees and careers related to this lecture

Medicine

Cardiologist

Geopolitical anomalies: what can they teach us?

Alex started his lecture by defining what is meant by the term 'geopolitical anomalies', and considering what the term 'state' means in relation to space and power. He then examined places which do not fit neatly in to our ideas about states, including governments in exile, micronations and no man's lands. Alex concluded by stressing how geopolitical anomalies are particularly useful to geographers seeking to understand how and why our world is ordered the way it is.



Alex Manby, PhD student in Geopolitics

[Link to lecture](#)



Follow these links to find out about degrees and careers related to this lecture

[Human Sciences](#)

[PPE](#)

[Lucy Crane, Senior Geologist](#)



How do we see?

At the beginning of Maria's lecture, she asked us to consider why seeing is important to a monkey. Maria then explained the three levels of visual processing and how neurons, namely those used for sight, work. She then moved to discuss how patients with brain lesions can teach us about object recognition and location, and finally how our eyes are 'tricked' by optical illusions.

Maria Ruesseler, PhD
student in Neuroscience

[Link to lecture](#)



Follow these links to find out about degrees and careers related to this lecture

[Biological Sciences](#)

[Biomedical Sciences](#)

[Heather Jeffrey, Research Scientist](#)

Related Opportunities

Are you looking for exciting subject-specific opportunities which could develop your skills and help your university application? Then take a look at these competitions and initiatives, which are related to the lectures and subjects contained in this Further Reading resource.....

Get Involved

Medicine & Neuroscience: British Medical Association, Getting Medical Work Experience

Work experience in a caring or service role is now an essential step when getting into medical school. Medical schools will be looking for students who have gained a broad range of healthcare experience. This page from the British Medical Association provides helpful guidance on who to when seeking voluntary or paid work experience.

[For more details, click this link](#)

Geography: CITiZAN, Intertidal Monitoring App

CITiZAN, the Coastal and Intertidal Zone Archaeological Network, highlights the threat of coastal erosion to foreshore and intertidal sites. These archaeological features encompass a huge time span, many are of considerable local or national significance and most have no statutory protection. The free CITiZAN app can be used to locate and record new geological features along the UK's coastline, and helps to monitor at-risk archaeology.

[You can download the app to a smartphone, and find more about it by clicking here](#)

Geopolitics: Historic England, Enrich the List

The Historic England List has over 400,000 entries: tower blocks and tombstones, barrows and bunkers, palaces and pigsties, plague crosses and piers, cathedrals, windmills and rollercoasters. Many places on the List are well-known and even world-famous. But in some cases there is much that remains unknown. Historic England invite you to share your knowledge and pictures of listed places, so we can record information, and even unlock the secrets of some places.

[For more details on how to submit a list entry, click this link](#)

Explore More

Geopolitics: Historic England Climate Change Special Issue

The Historic English Research publication recently released a special issue on Climate Change, which contains a variety of articles exploring how climate change is impacting their heritage sites.

Discovery, Innovation and Science in the Historic Environment Research Magazine (Climate Change Special Issue)

Read the article 'Articulating loss; understanding and communicating the loss of coastal heritage', and consider the following questions:

- This article stresses the different ways in which loss of heritage occurs, through both climate change and human interaction with a site. What kinds of behaviour or environmental factors result in heritage loss?
- Think of a heritage site (either a property or landmark) close to you. Re-read the four themes of loss which are outlined on p.54 of the article (invisible, adaptive, inevitable and radical). Which theme of loss do you think is most relevant to your heritage site?
- Why is it important for heritage sites to recognise loss as a part of their conservation policy?

Medicine: The Wellcome Collection, A History of Assistive Vision

Alex Lee was working in his father's restaurant when he noticed there was something seriously wrong with his vision. Tests would later reveal that an inherited condition was causing sight loss. These six articles from the Wellcome Collection detail Alex's journey and explain the history, and future, of assistive vision.

A History of Assistive Vision

Read the first article in the series, 'Life Before Assistive Technology'. In this article, Alex explains that he was diagnosed with Leber Hereditary Optic Neuropathy. Using the links embedded in the article, consider the following questions:

- What are the signs and symptoms of Leber Hereditary Optic Neuropathy?
- What is a mitochondrial disease?
- Why should individuals with LHOP avoid smoking and excessive drinking?

Geography: BBC Radio 4 Start the Week podcast, 'On Thin Ice: Glaciers, Geopolitics and Nature's Goods'

In this podcast, three specialists discuss the impact of glaciers and what their loss could mean for us. Listen to the episode and consider the following questions:

- Glaciologist Jemma Wadham explains that microbes have been discovered living in sheet ice and glaciers. What is the value of these microbes?
- Founding director of the Polar Research and Policy Initiative, Dwayne Ryan Menezes, explains that the glaciers in Greenland contain rare earth elements, which are used in various kinds of technology. What are the advantages and disadvantages of mining for rare earth elements in Greenland, both environmentally and politically? Who or what benefits from this rare earth element mining?
- Anne Sverdrup-Thygeson argued that a connection with the natural world is important for humans. What were these reasons, and what other reasons can you think of?



Explore

Explore is an innovative digital outreach portal from the University of Oxford. As the 'Home of Big Questions' it aims to engage those from 11 to 18 years with debates and ideas that go beyond what is covered in the classroom. Big questions tackle complex ideas across a wide range of subjects and draw on the latest research undertaken at Oxford. Click these links to start exploring some Big Questions...

[Are humans ruining the earth?](#)

[Can you choose to be healthy?](#)

[Could a country disappear?](#)

Further Reading Resources

Geography, Medicine,
Geopolitics, Neuroscience

Did you enjoy these taster lectures
and Further Reading resources?
You might be interested in attending one of our
[Study Days](#) or [Subject Exploration days](#)

• St John's •
inspire
programme

